

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
7 February 2002 (07.02.2002)

PCT

(10) International Publication Number  
**WO 02/10373 A2**

(51) International Patent Classification: **C12N 15/10**,  
C12Q 1/68, C07H 1/08, B01D 15/08, B01L 3/00

(74) Agents: **POWERS, Vincent et al.**; Applied Biosystems,  
850 Lincoln Centre Drive, Foster City, CA 94404 (US).

(21) International Application Number: **PCT/US01/22789**

(22) International Filing Date: 17 July 2001 (17.07.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/222,371 31 July 2000 (31.07.2000) US

(71) Applicant: **PE CORPORATION (NY)** [US/US]; 850  
Lincoln Centre Drive, Foster City, CA 94404 (US).

(72) Inventors: **SHIGEURA, John**; 1021 Los Trancos Road,  
Portola Valley, CA 94028 (US). **CHEN, Jer-Kang**; 882  
Ames Avenue, Palo Alto, CA 94303 (US).

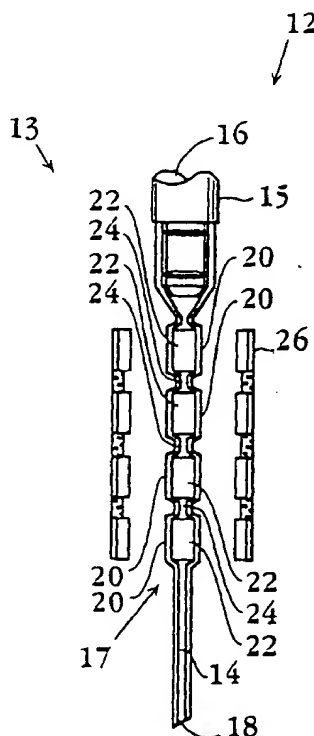
(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GI,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,  
SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian  
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European  
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,  
IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,  
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,  
TG).

[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR SPECIFIC RELEASE OF CAPTURED EXTENSION PRODUCTS

(57) Abstract: Apparatus and methods for separating different polynucleotide populations in a mixture are provided, wherein different polynucleotides or polynucleotide populations are captured on different solid support. After hybridization, polynucleotides are selectively released from a selected support by altering a physical property of that support. The released polynucleotides can be eluted from a common flow path and isolated.



WO 02/10373 A2



**Published:**

— without international search report and to be republished  
upon receipt of that report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*